

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 10/532,168
Source: 1 FWP
Date Processed by STIC: 7/17/06

ENTERED



IFWP

RAW SEQUENCE LISTING

DATE: 07/17/2006

PATENT APPLICATION: US/10/532,168

TIME: 10:38:27

Input Set : A:\08191-029US1.txt

Output Set: N:\CRF4\07172006\J532168.raw

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4 <110> APPLICANT: Beach, Kathleen
5      Hedley, Mary Lynne
6      Urban, Robert G.
7      Chicz, Roman M.
10 <120> TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR TREATING
11      HUMAN PAPILLOMAVIRUS-MEDIATED DISEASE
14 <130> FILE REFERENCE: 08191-029US1
16 <140> CURRENT APPLICATION NUMBER: US 10/532,168
17 <141> CURRENT FILING DATE: 2005-04-20
19 <150> PRIOR APPLICATION NUMBER: PCT/US03/32705
20 <151> PRIOR FILING DATE: 2003-10-16
22 <150> PRIOR APPLICATION NUMBER: US 60/420,068
23 <151> PRIOR FILING DATE: 2002-10-21
25 <150> PRIOR APPLICATION NUMBER: US 60/471,481
26 <151> PRIOR FILING DATE: 2003-05-15
28 <160> NUMBER OF SEQ ID NOS: 98
30 <170> SOFTWARE: FastSEQ for Windows Version 4.0
32 <210> SEQ ID NO: 1
33 <211> LENGTH: 20
34 <212> TYPE: PRT
35 <213> ORGANISM: Human papillomavirus
37 <400> SEQUENCE: 1
38 Ala Met Phe Gln Asp Pro Gln Glu Arg Pro Arg Lys Leu Pro Gln Leu
39 1          5          10          15
40 Cys Thr Glu Leu
41          20
44 <210> SEQ ID NO: 2
45 <211> LENGTH: 24
46 <212> TYPE: PRT
47 <213> ORGANISM: Human papillomavirus
49 <400> SEQUENCE: 2
50 Leu Leu Arg Arg Glu Val Tyr Asp Phe Ala Phe Arg Asp Leu Cys Ile
51 1          5          10          15
52 Val Tyr Arg Asp Gly Asn Pro Tyr
53          20
56 <210> SEQ ID NO: 3
57 <211> LENGTH: 21
58 <212> TYPE: PRT
59 <213> ORGANISM: Human papillomavirus
61 <400> SEQUENCE: 3
62 Lys Ile Ser Glu Tyr Arg His Tyr Cys Leu Tyr Gly Thr Thr Leu Glu
63 1          5          10          15
64 Gln Gln Tyr Asn Lys

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65          20
68 <210> SEQ ID NO: 4
69 <211> LENGTH: 19
70 <212> TYPE: PRT
71 <213> ORGANISM: Human papillomavirus
73 <400> SEQUENCE: 4
74 Thr Leu His Glu Tyr Met Leu Asp Leu Gln Pro Glu Thr Thr Asp Leu
76 1          5          10          15
77 Tyr Ser Tyr
80 <210> SEQ ID NO: 5
81 <211> LENGTH: 14
82 <212> TYPE: PRT
83 <213> ORGANISM: Human papillomavirus
85 <400> SEQUENCE: 5
86 Gln Ala Glu Pro Asp Arg Ala His Tyr Asn Ile Val Thr Phe
87 1          5          10
90 <210> SEQ ID NO: 6
91 <211> LENGTH: 17
92 <212> TYPE: PRT
93 <213> ORGANISM: Human papillomavirus
95 <400> SEQUENCE: 6
96 Leu Leu Met Gly Thr Leu Gly Ile Val Cys Pro Ile Cys Ser Gln Lys
97 1          5          10          15
98 Pro
102 <210> SEQ ID NO: 7
103 <211> LENGTH: 42
104 <212> TYPE: PRT
105 <213> ORGANISM: Human papillomavirus
107 <400> SEQUENCE: 7
108 Arg Arg Pro Tyr Lys Leu Pro Asp Leu Cys Thr Glu Leu Asn Thr Ser
109 1          5          10          15
110 Leu Gln Asp Ile Glu Ile Thr Cys Val Tyr Cys Lys Thr Val Leu Glu
111          20          25          30
112 Leu Thr Glu Val Phe Glu Phe Ala Phe Lys
113          35          40
116 <210> SEQ ID NO: 8
117 <211> LENGTH: 25
118 <212> TYPE: PRT
119 <213> ORGANISM: Human papillomavirus
121 <400> SEQUENCE: 8
122 Ser Val Tyr Gly Asp Thr Leu Glu Lys Leu Thr Asn Thr Gly Asn Leu
123 1          5          10          15
124 Leu Ile Arg Cys Leu Arg Cys Gln Lys
125          20          25
128 <210> SEQ ID NO: 9
129 <211> LENGTH: 19
130 <212> TYPE: PRT
131 <213> ORGANISM: Human papillomavirus
133 <400> SEQUENCE: 9

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134 Lys Ala Thr Leu Gln Asp Ile Val Leu His Leu Glu Pro Gln Asn Glu
135 1 5 10 15
136 Ile Pro Val
140 <210> SEQ ID NO: 10
141 <211> LENGTH: 14
142 <212> TYPE: PRT
143 <213> ORGANISM: Human papillomavirus
145 <400> SEQUENCE: 10
146 His Thr Met Leu Cys Met Cys Cys Lys Cys Glu Ala Arg Ile
147 1 5 10
150 <210> SEQ ID NO: 11
151 <211> LENGTH: 17
152 <212> TYPE: PRT
153 <213> ORGANISM: Human papillomavirus
155 <400> SEQUENCE: 11
156 Ala Phe Gln Gln Leu Phe Leu Asn Thr Leu Ser Phe Val Cys Pro Trp
157 1 5 10 15
158 Cys
162 <210> SEQ ID NO: 12
163 <211> LENGTH: 230
164 <212> TYPE: PRT
165 <213> ORGANISM: Artificial Sequence
167 <220> FEATURE:
168 <223> OTHER INFORMATION: Synthetically generated peptide
170 <400> SEQUENCE: 12
171 Ala Met Phe Gln Asp Pro Gln Glu Arg Pro Arg Lys Leu Pro Gln Leu
172 1 5 10 15
173 Cys Thr Glu Leu Leu Leu Arg Arg Glu Val Tyr Asp Phe Ala Phe Arg
174 20 25 30
175 Asp Leu Cys Ile Val Tyr Arg Asp Gly Asn Pro Tyr Lys Ile Ser Glu
176 35 40 45
177 Tyr Arg His Tyr Cys Leu Tyr Gly Thr Thr Leu Glu Gln Gln Tyr Asn
178 50 55 60
179 Lys Thr Leu His Glu Tyr Met Leu Asp Leu Gln Pro Glu Thr Thr Asp
180 65 70 75 80
181 Lys Tyr Gln Ala Glu Pro Asp Arg Ala His Tyr Asn Ile Val Thr Phe
182 85 90 95
183 Leu Leu Met Gly Thr Leu Gly Ile Val Cys Pro Ile Cys Ser Gln Lys
184 100 105 110
185 Pro Arg Arg Pro Tyr Lys Leu Pro Asp Leu Cys Thr Glu Leu Asn Thr
186 115 120 125
187 Ser Leu Gln Asp Ile Glu Ile Thr Cys Val Tyr Cys Lys Thr Val Leu
188 130 135 140
189 Glu Leu Thr Glu Val Phe Glu Phe Ala Phe Lys Ser Val Tyr Gly Asp
190 145 150 155 160
191 Thr Leu Glu Lys Leu Thr Asn Thr Gly Asn Leu Leu Ile Arg Cys Leu
192 165 170 175
193 Arg Cys Gln Lys Lys Ala Thr Leu Gln Asp Ile Val Leu His Leu Glu
194 180 185 190

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195 Pro Gln Asn Glu Ile Pro Val His Thr Met Leu Cys Met Cys Cys Lys
196      195      200      205
197 Cys Glu Ala Arg Ile Ala Phe Gln Gln Leu Phe Leu Asn Thr Leu Ser
198      210      215      220
199 Phe Val Cys Pro Trp Cys
200 225      230
203 <210> SEQ ID NO: 13
204 <211> LENGTH: 255
205 <212> TYPE: PRT
206 <213> ORGANISM: Artificial Sequence
208 <220> FEATURE:
209 <223> OTHER INFORMATION: Synthetically generated peptide
211 <400> SEQUENCE: 13
212 Met Ala Ile Ser Gly Val Pro Val Leu Gly Phe Phe Ile Ile Ala Val
213 1      5      10      15
214 Leu Met Ser Ala Gln Glu Ser Trp Ala Ala Met Phe Gln Asp Pro Gln
215      20      25      30
216 Glu Arg Pro Arg Lys Leu Pro Gln Leu Cys Thr Glu Leu Leu Arg
217      35      40      45
218 Arg Glu Val Tyr Asp Phe Ala Phe Arg Asp Leu Cys Ile Val Tyr Arg
219      50      55      60
220 Asp Gly Asn Pro Tyr Lys Ile Ser Glu Tyr Arg His Tyr Cys Leu Tyr
221 65      70      75      80
222 Gly Thr Thr Leu Glu Gln Gln Tyr Asn Lys Thr Leu His Glu Tyr Met
223      85      90      95
224 Leu Asp Leu Gln Pro Glu Thr Thr Asp Lys Tyr Gln Ala Glu Pro Asp
225      100      105      110
226 Arg Ala His Tyr Asn Ile Val Thr Phe Leu Leu Met Gly Thr Leu Gly
227      115      120      125
228 Ile Val Cys Pro Ile Cys Ser Gln Lys Pro Arg Arg Pro Tyr Lys Leu
229      130      135      140
230 Pro Asp Leu Cys Thr Glu Leu Asn Thr Ser Leu Gln Asp Ile Glu Ile
231 145      150      155      160
232 Thr Cys Val Tyr Cys Lys Thr Val Leu Glu Leu Thr Glu Val Phe Glu
233      165      170      175
234 Phe Ala Phe Lys Ser Val Tyr Gly Asp Thr Leu Glu Lys Leu Thr Asn
235      180      185      190
236 Thr Gly Asn Leu Leu Ile Arg Cys Leu Arg Cys Gln Lys Lys Ala Thr
237      195      200      205
238 Leu Gln Asp Ile Val Leu His Leu Glu Pro Gln Asn Glu Ile Pro Val
239      210      215      220
240 His Thr Met Leu Cys Met Cys Cys Lys Cys Glu Ala Arg Ile Ala Phe
241 225      230      235      240
242 Gln Gln Leu Phe Leu Asn Thr Leu Ser Phe Val Cys Pro Trp Cys
243      245      250      255
246 <210> SEQ ID NO: 14
247 <211> LENGTH: 255
248 <212> TYPE: PRT
249 <213> ORGANISM: Artificial Sequence

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251 <220> FEATURE:

252 <223> OTHER INFORMATION: Synthetically generated peptide

254 <400> SEQUENCE: 14

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255 Met Ala Ile Ser Gly Val Pro Val Leu Gly Phe Phe Ile Ile Ala Val
256 1          5          10          15
257 Leu Met Ser Ala Gln Glu Ser Trp Ala Ala Met Phe Gln Asp Pro Gln
258          20          25          30
259 Glu Arg Pro Arg Lys Leu Pro Gln Leu Cys Thr Glu Leu Leu Leu Arg
260          35          40          45
261 Arg Glu Val Tyr Asp Phe Ala Phe Arg Asp Leu Cys Ile Val Tyr Arg
262          50          55          60
263 Asp Gly Asn Pro Tyr Lys Ile Ser Glu Tyr Arg His Tyr Cys Leu Tyr
264 65          70          75          80
265 Gly Thr Thr Leu Glu Gln Gln Tyr Asn Lys Thr Leu His Glu Tyr Met
266          85          90          95
267 Leu Asp Leu Gln Pro Glu Thr Thr Asp Lys Tyr Gln Ala Glu Pro Asp
268          100         105         110
269 Arg Ala His Tyr Asn Ile Val Thr Phe Leu Leu Met Gly Thr Leu Gly
270          115         120         125
271 Ile Val Cys Pro Ile Cys Ser Gln Lys Pro Arg Arg Pro Tyr Lys Leu
272          130         135         140
273 Pro Asp Leu Cys Thr Glu Leu Asn Thr Ser Leu Gln Asp Ile Glu Ile
274 145         150         155         160
275 Thr Cys Val Tyr Cys Lys Thr Val Leu Glu Leu Thr Glu Val Phe Glu
276          165         170         175
277 Phe Ala Phe Lys Ser Val Tyr Gly Asp Thr Leu Glu Lys Leu Thr Asn
278          180         185         190
279 Thr Gly Asn Leu Leu Ile Arg Cys Leu Arg Cys Gln Lys Lys Ala Thr
280          195         200         205
281 Leu Gln Asp Ile Val Leu His Leu Glu Pro Gln Asn Glu Ile Pro Val
282          210         215         220
283 His Thr Met Leu Cys Met Cys Cys Lys Cys Glu Ala Arg Ile Ala Phe
284 225         230         235         240
285 Gln Gln Leu Phe Leu Asn Thr Leu Ser Phe Val Cys Pro Trp Cys
286          245         250         255

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289 <210> SEQ ID NO: 15

290 <211> LENGTH: 9

291 <212> TYPE: PRT

292 <213> ORGANISM: Human papillomavirus HPV 16 E6

294 <400> SEQUENCE: 15

295 Ile Ser Glu Tyr Arg His Tyr Cys Tyr

296 1 5

299 <210> SEQ ID NO: 16

300 <211> LENGTH: 9

301 <212> TYPE: PRT

302 <213> ORGANISM: Human papillomavirus HPV 16 E6

304 <400> SEQUENCE: 16

305 Phe Gln Asp Pro Gln Glu Arg Pro Arg

306 1 5

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